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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,844	05/25/2001	Frederic Plissonneau	PF980080	4737

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EXAMINER	
VO, TUNG T	

ART UNIT	PAPER NUMBER
2613	4

DATE MAILED: 02/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/856,844	PLISSONNEAU ET AL.	
	Examiner	Art Unit	
	Tung T. Vo	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10 and 11* is/are rejected.

7)☒ Claim(s) *8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-7, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (US 5,959,672) in view of Chen et al. (US 6,208,693 B1).

Re claims 1-7, 10 and 11, Sasaki teaches a device for coding digital video data according to the **MPEG** standard (fig. 1) for the insetting of at least one imagette into an image, comprising

a subtractor (8 of fig. 1) receiving on a first input an intra macroblock and on a second input a predicted macroblock to be subtracted from the intra macroblock so as to provide an inter macroblock,

a circuit (6 of fig. 1) for selecting an inter or intra mode receiving the corresponding intra macroblock or inter macroblock for selecting one of the macroblocks according to an energy criterion,

a circuit (7 and 9 of fig. 1) for transforming and quantizing the macroblock selected so as to provide a macroblock of quantized coefficients a circuit (10 of fig. 1) for the variable-length coding of the macroblock of quantized coefficients and a buffer memory for providing a data stream at the output of the coding device,

an inverse quantization and inverse transformation circuit (13 and 14 of fig. 1)for obtaining a macroblock reconstituted from the macroblock of quantized coefficients in an adder (15 of fig. 1) of the reconstituted macroblock,

a memory and predictor (16 and 25 of fig. 1) for storing the reconstructed macroblock and providing a reconstructed image, a motion estimator receiving the intra macroblock and the reconstructed macroblocks so as to provide a motion vector for the memory and predictor so as to calculate the predicted block,

a regulating circuit (21 of fig. 1) receiving information form the buffer memory so as to set a quantization interval for the transform and quantization circuit, wherein:

the selection circuit and the motion estimation circuit (7 and 25 of fig. 1) receive an information item pertaining to an exclusion zone which includes the macroblocks lying, even partially, in the location of the imagette (steps A1-A11 of fig. 5),

the selection circuit (7 of fig. 1) forces the intra-coding of the **macroblocks belonging** to this exclusion zone (step A11 of fig. 5), wherein the inter mode for the encoding of the marcroblocks of the image belonging to an exclude zone is an inter mode with null motion vectors (fig. 28, background has been encoded).

It is noted that Sasaki does not teach the motion estimation circuit calculates the motion vectors while eliminating the motion vectors pointing from the blocks of the reconstructed image belonging to the exclusion zone and in that it comprises a substitution circuit to substitute, in **the data stream, macroblocks corresponding** to the exclusion zone by macroblocks coding the imagette as claimed.

However, Chen teaches the motion estimation circuit (211 of fig. 1) calculates the motion vectors while eliminating the motion vectors pointing from the blocks of the

reconstructed image belonging to the exclusion zone (530 of fig. 5, inside the object) and in that it comprises a substitution circuit to substitute (206 of fig. 1), in **the data stream, macroblocks corresponding** to the exclusion zone by macroblocks coding the imagette (520 of fig. 5, replace the macroblocks outside the object with a chrome-key color K). Therefore, it would have been obvious to one skill of to incorporate the teachings of Chen (fig. 5) into the device of Sasaki for the same purpose of estimating the macroblocks of the image not belonging to the exclusion zone does not take account of an image block belonging to the exclusion zone in the reference image as claimed. Doing so would reduce bandwidth signal so that the storages are able to store more image at a given communication rate as suggested by Chen (col. 1).

Allowable Subject Matter

3. Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chiang et al. (US 6,084,908) discloses an apparatus and method for quadtree based variable block size motion estimation.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung T. Vo whose telephone number is (703) 308-5874. The examiner can normally be reached on 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris. Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TUNG T VO
PATENT EXAMINER

T.Vo

Tung T. Vo
Examiner
Art Unit 2613